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ABSTRACT

This study examined interrelationships between educators' role in teaching values and their responsibility for teaching mandatory curricula and preparing students for formal assessment. It investigated 15 British teachers' values as transmitted to 10th grade science and language arts students, gauging the impact of their values on student experience. Teacher interviews were followed by classroom observation in which two critical incidents were selected as the focus for followup interviews with teacher-student groups. Critical incidents related to subject matter and classroom management, student behavior, and teacher control. Overall, teachers emphasized the demands of the examination system, transmitting largely instrumental values. English teachers were more likely than science teachers to explore intrinsic values. Teachers of disruptive students often appealed to the instrumental value of the subject. English teachers introduced their values as part of a balanced debate. Science teachers were uncertain about the role of values in subject teaching. Respect was ill-defined but linked to teacher power. Science teachers did not exhibit resistance to the dominant culture of testing and imposed curriculum. Less academically successful students were alienated from science values. They saw school rules rather than shared values as indicators of social injustice and double standards. (Contains 17 references.) (SM)

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Robert Butroyd, University of Huddersfield and Bridget Somekh, Manchester Metropolitan University

A paper presented at the Annual Meeting of the American Educational Research Association, Seattle, April 2001

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Introduction

This presentation will raise issues with the AERA audience relating to the inter-relationship between teachers' role in teaching values in a civil society, and their responsibility for teaching mandatory curricula and preparing students for formal assessment. Although the UK context is different, many of the issues relating to curriculum, assessment and the teachers' role are very similar to those apparent in US public education systems. The presentation will also explore the extent to which teachers might gain a better understanding of their role in modelling and transmitting the values of a civil society from using the ReVISE professional development materials.

The objectives of the research

There is currently considerable concern amongst politicians and the general public in England that young people are not being educated in the values of a *civic society.* Hargreaves provides a definition of civic society which encompasses both the narrow concern with social control and the broader aspiration for a society expressive of the values and purposes of its citizens:

> Civic education is about the civic virtues and decent behaviour that adults wish to see in young people. But it is also more than this. Since Aristotle it has been accepted as an inherently political concept that raises questions about the sort of society we live in, how it comes to take its present form....(Hargreaves, 1997, p4.

Problems with teenage gangs, 'loutish' behaviour, racist attacks and student violence towards teachers, including a high profile murder of a High School head teacher in 1996, led to the UK government setting up a

Citizenship Advisory Group in 1997. Based on its recommendations (Crick, 1998), changes to the National Curriculum for public education make Citizenship Education in high schools mandatory from September 2002, which will lead to the assessment of Citizenship for 16 year olds. The response of government has, therefore, been to 'add on' a new subject to the existing curriculum. The way that values are transmitted to adolescent students through the curriculum as a whole, as part of the pedagogical process has not been addressed by policy-makers, who appear to have assumed that the pedagogical process is a simple matter of 'curriculum delivery', neutral and, therefore, unproblematic.

It is of significance that a very different approach to moral education had been promoted in the UK during the 1970s, through Lawrence Stenhouse's Humanities Curriculum Project (HCP), a curriculum development project funded by the Schools Council (Stenhouse 1975). HCP had strong affinities with Bruner's Man a Course of Study (MACOS) in its emphasis upon students developing their own knowledge and understanding from the exploration of artefacts and resources. The central pedagogical tenet of HCP was that teachers should adopt the role of a 'neutral chairman' (sic) and facilitate students in debating moral issues and reaching conclusions about possible courses of action through interaction and open debate (stimulated by resources such as newspaper articles and photographs). By this means, HCP intended that students would develop their own moral values in relation to the kind of problems they were likely to face in their own lives in the modern world. HCP was designed to support moral development in a pluralist society, in which the role of the church as moral arbitrator was beginning to break down. HCP's underpinning philosophy was strongly opposed by Margaret Thatcher who is reported to have commented on an exhibition of HCP's work, while she was Secretary of State for Education and Science, 'When I was a girl, I was taught the difference between right and wrong.' It is likely that her dislike of projects such as HCP was a contributory factor in her decision to disband the Schools Council in 1982 after she became Prime Minister.

Drawing on the work of Apple, Giroux and Popkevitz, our research has investigated the value-laden nature of the pedagogical process and the mechanisms of social control embedded in educational practices of prescribed curricula and assessment. It has been carried out at a time when the UK government is introducing direct instruction in citizenship in order to combat youth violence and anti-social behaviour, without addressing the way in which values are transmitted through teaching of the National Curriculum. It is impossible to say to what extent today's schools and teachers have been influenced by Stenhouse's HCP, but it is likely that it has been a factor in shaping the pedagogical practices embedded in what Stenhouse himself called 'the traditional curriculum of teachers' that is strongly resistant to imposed policy changes.

The Research into Values in Secondary Education Project (ReVISE), 1998 – 2000, funded by the Gordon Cook Foundation (Butroyd and Somekh, 1999), had the following aims:

- To explore the nature of teachers' values as developed and transmitted to year 10 students in Science and English (Language Arts) classrooms.
- To gauge the impact of teachers' values on student experience.
- To develop materials, based on the findings, for use in teacher professional development.

Taking our lead from Hargreaves' definition of civic society, this paper argues, on the basis of this research, that an examination of the daily experience of teaching in English (LA) and Science reveals something about the sort of society we live in, but also something about how it has come to take its present form.

Theoretical framework

The starting point was Dewey's (1944, p.239) distinction between 'intrinsic' and 'instrumental' values. An instrumental value was considered to be the 'means' of addressing some 'third thing'. This was often exam results, future employment, or related life skills and social skills . By contrast, an intrinsic value 'serves its

own end'. This might be the satisfaction of curiosity in Science, or an insight into the human condition in English (LA). Both students and teachers might be driven by either intrinsic or instrumental values. A second consideration was the extent to which teachers' espoused values were embedded in their practice. Within the context of a mandated National Curriculum and a system of high stakes, public examinations, the distinction between the unverifiable, ideal, preference of the teacher, and the achievable, evident practice of the classroom was likely to be marked. We also drew on earlier neo-Marxist studies for an analysis of the social reproductive impact of the British class system on students' motivation to learn (Willis 1977); the power of education systems in capitalist economies to shape teachers' pedagogy to perpetuate social control and oppression (Apple 1990); and ways in which teachers may be able to struggle to resist these oppressive forces of social reproduction (Giroux 1983). Within an education system which packages subject curricula as commodities to be acquired as a passport to jobs and/or higher education, we wanted to explore the extent to which resistance was possible. Would we find, played out in the classrooms where we based our research, the reproductive determinism of neo-Marxist theory, or would we find, as Habermas suggested (1984, p. 398), that in our own day, 'the social-life context reproduces itself *both* through the media-controlled purposive-rational actions of its members *and* through the common will anchored in the communicative practice of all individuals'? In other words, would we find that despite the controlling media of exchange embodied in the instrumental values of performativity and the commodification of knowledge, that individual teachers and students were still able to engage in shaping their world through communicative practices? Could instrumentalism and the participative rationality 'inherent in communicative action' (op cit p. 397) reside together in a way that would enable resistance to oppression and nurture intrinsic values?

In addition, we drew from Giroux's recent work a more holistic analysis of pedagogical practice as historically- and politically-shaped cultural production: 'Pedagogy is, in part, a technology of power, language, and practice that produces and legitimates forms of moral and political regulation that construct and offer human beings particular views of themselves and the world.' (Giroux 1997, p.226). A discipline-

based curriculum feeds into this process. As Popkewitz says, in a recent paper (Popkewitz 2000, p.23), ' A disciplinary field that school pedagogy draws on exists continually in two social spaces at the same time. One is the disciplinary space in which the internal rules of knowledge production are created, sustained, and changed. (...) The second ... is the cultural and political context in which disciplines function.' The research focused on practice in classrooms to see how the process of knowledge production was shaped by the context of the school and the education and examination systems – and how the values of a civic society were transmitted as part of this process.

Methods

The research was designed to investigate a small number of classrooms in depth. Two Science teachers and two English (LA) teachers, from each of four local schools, were invited to participate in the study. In one school the two Science teachers declined on the grounds that, in their view, teaching values was not their concern and, as a result, a Science teacher in a further school was invited to join the project, making a total of 15 participating teachers. Data were collected in 'intensive episodes' in order to provide maximum evidence relating to 'critical incidents'. Each episode began with an interview with the teacher, followed by a classroom observation during which two 'critical incidents' were selected as the focus for follow-up interviews with a group of students and with the teacher. We adopted Tripp's definition of 'critical incidents' as classroom incidents 'indicative of underlying trends, motives and structures' According to Tripp, a focus on critical incidents, provides 'a means of enabling teachers to be more aware of the nature of their professional values and associated problematics, to question their own practice, and to concretise their generally abstract notions of values such as social justice.' (Tripp 1993, p.35). Thus, by selecting critical incidents as the foci for interviews we intended to provide opportunities for teachers to explore the nature of the values embedded in their pedagogy. The selected critical incidents were of two types, one related to the nature of subject matter of the discipline and the second to classroom management, student behaviour and teacher control (normally – and rather confusingly in this context – called 'discipline' by teachers in

England). The follow-up interviews used these critical incidents as a focus, but discussion frequently ranged more widely to related issues. Dilemma analysis was used to explore the interview transcripts. This approach draws upon Berlak and Berlak's (1981) insight that teaching is characterised by a large number of inherent dilemmas or tensions, which render teachers' actions as problematic. Dilemmas are characterised by 'hesitancy, puzzlement, uncertainty, a sense of difficulty or stress' (Somekh 1995) 'complexity, tension and contradiction' (Winter 1982). By focusing the attention of the researcher on these moments of tension and uncertainty, 'dilemma analysis' identified significant issues derived from the conflicting values implied by different possible courses of action. Teachers and students frequently started from different assumptions. Dilemmas often emerged from a comparison of the teacher and student interviews, but also from comparisons of what teachers said over their two interviews, and what students said in their group interviews. Transcripts of the interviews and the emerging dilemmas were discussed with the teachers and amended in the light of this collaboration. On a number of occasions teachers commented that they had never talked of such issues before in a professional context. During a follow-up workshop the draft materials (double-sided discussion cards designed for use in school-based teacher professional development), derived from the research, were trialed with 10 of the original teachers from the project. After the discussion cards had been used the teachers were asked to complete written comments on the materials, which in effect embodied our research conclusions. These comments were written anonymously, but in practice were subsequently attributed to the key informants through the seating plan and handwriting. Although this procedure contained an unintended element of deception, it appears that the teachers were not concerned to hide their identity from us, since most chose to write comments that closely reflected their verbal comments in the preceding discussion. The methods of data analysis and the process of interpretation of the data were both considerably refined and enriched by two two-day meetings (tape-recorded), one prior to the field work and one as the research was nearing completion, with a small advisory group of experts representing different constituencies of interest

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(experienced teachers, a university-based researcher, and representatives of two charitable foundations dedicated to values education, including a Fellow of the Gordon Cook Society (our sponsor).

Evidence

The evidence consisted of 15 sets of data (each containing 2 teacher interviews, observation notes from one class, and 1 interview with a group of 4 or 5 students) relating to 15 case studies of the pedagogical practice of 15 teachers working with year 10 students. Of these, 8 were English (language arts) teachers and 7 were Science teachers. In all cases the students were in classes that were preparing for public, high-stakes examinations at the end of year 11. Further evidence derived from the follow-up workshops with teachers, consisting of both written notes of the discussion and teachers' written comments on the materials. These qualitative data were collected and analysed systematically and provided a considerable body of evidence.

Results

The nature of teachers' values as developed and transmitted to year 10 students.

1. Teachers focus upon the demands of the examination system and, as a consequence, the values that they transmit are largely instrumental. However, English (LA) teachers are more likely to explore intrinsic values than are their Science colleagues.

The data reveal that these teachers love their subject, but they are restricted in the main to promoting their subject as a means to an end. That end is largely seen as examination success, a GCSE at grade A – C[1]. English (LA) teachers are somewhat less pressured in this respect than Science teachers, and to varying extents are able to encourage students to use English (LA) to help them make sense of their

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lives, providing a greater opportunity to explore its intrinsic value. Science teachers, meanwhile, concentrate upon the practices of a scientist rather than issues related to the impact of Science on our lives – or even on developing understanding of scientific concepts. Brenda was the only Science teacher observed who overtly touched upon the issues that derived from the application of Science. This approach contributes to the alienation of those students who are unlikely to achieve a grade A – C. These findings about the teaching of Science for high stakes examinations, in our case study schools, closely reflect Page's findings in a case study of an academically prestigious American high school, in which she found 'a veritable absence of science in Science' (Page, 1999). Like Page, our data suggest that this is a result of teachers' and pupils' rational responses to the 'particular institutional and social circumstances' in which they find themselves. Similarities between our work and the work of Page provides evidence of the underlying similarities between the UK and USA education systems. Teachers are operating under pressure in the UK. School 'league tables' of results published in the national press are used by parents to select schools for their students, and as funding follows student numbers this puts pressure on schools and individual teachers to be successful. Success, in terms of the tables, is measured by the percentage of students who obtain grades A – C in public GCSE examinations in Year 11, when students are 16. English (LA) teachers in the sample do not appear to have the same pressures on them in terms of content to be covered as the Science teachers do. However, both sets of teachers are pressured to 'set' students, so that those who are likely to get the grades A – C can be grouped together. Those who are deemed likely to achieve a D or below are also grouped together. This sends a signal to these students and teachers about what is achievable. This can, in some classrooms, undermine the student's perception of the value of studying the subject, as the achievement of a grade below a 'C' reduces the subject's instrumental value.

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[1] At age 16, students in England take separate subject examinations within the General Certificate of Secondary Education (GCSE). GCSEs are national examinations. There is no equivalent to the US system of graduating from

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Science has two particular problems: the syllabus, which appears much more constraining than for English (LA), and class size, as these comments from Dennis and his students illustrate:

> *Q. Is curiosity and exploration a reality in Science?* We have got to teach them a certain area of the curriculum...ideally you would do, but in reality you can't because of your class size and so on. But, we might say 'we are going to investigate how this affects this', and they will do an experiment...It is not their curiosity as such. I suppose it is me telling them how to find something out.
>
> Students: *Q. How could lessons be improved? P1* He can't, unless he changed the syllabus. *P2* different kinds of experiments so it isn't always heating up a substance over a Bunsen burner or something. *P3* Something that has got the element of surprise.

Science teachers, when asked about the values that Science offered talked about reason, explanation, enquiry, and curiosity, but the reality was more mundane. Students talked of being 'real bored' in Science classes, and of not seeing the relevance of repeating experiments that had been completed numerous times before, where the outcome was already well known. Science's particular problems are compounded by class size, which has an impact upon the nature of experiments, and a crowded syllabus which concentrates upon how to become a scientist, rather than engaging in the wonders of the scientific world. These problems are less acute in the A – C sets where, although the students recognise the limitations of the syllabus, they are likely to be successful in terms of the instrumental values of the subject. In Derek's written comments he explained the difficulties of exploring values:

> Currently time for discussion is rarely available due to the problem of trying to complete the syllabus... *Researchers statement: Science teachers often leave values with students unexplored.* This is more likely to be due to insufficient time for discussion, or that they are not sure of their position, or do not feel sufficiently well informed to tackle the subject.

English (LA) teachers are also pressured to focus on student results through setting and testing, but they appear in a much stronger position to resist these pressures. Two of the teachers continued to group students in mixed ability classes, for example, against recent government pronouncements on best practice. They, and their students, talk about the intrinsic values of the subject, and also talk about how the practice of it, which begins with the instrumental value of the subject, such as developing student language, also moves to wider values such as insight

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High School on the basis of teachers' assessments.

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into the human condition. English (LA) teachers saw the exploration of such intrinsic values as central to their role, whereas, Science teachers were much less sure of their role in allowing students to explore their relationship with Science, despite being one of the most powerful influences upon their life. Brenda explains:

> I don't think that we have the time that we used to have to go off at little tangents when something particularly catches the children's interest, which I used to do quite commonly when I started teaching....pressures of producing examination results have meant that you really don't have the time to do that now. .....Q. *If you could choose, would you still teach those dry aspects of your subject?* I mean, I don't question it any more now. I just do it. I don't question it any more because I am given a syllabus. I've got to teach it. I've got to teach (to get) some exam results at the end of it, and if I don't cover the syllabus then I don't get the results. And so I don't question it. I get the syllabus and I work to it.

Brenda is, herself, alienated from the values of the syllabus. The syllabus becomes an object which has to be delivered. There is little room for her intervention, or her students'. Dennis, at the same school understood 'pure' Science to be 'neutral, objective, technical'. In Science, the focus of the lessons is on scientific method, learning to be a scientist: planning for collecting , obtaining, and presenting evidence, considering and evaluating it, rather than exploring scientific ideas, controversies, contexts and limitations. Even more extreme than Denis in taking this view were the two Science teachers who declined to take part in the research because they saw no connection whatever between teaching Science and teaching values.

2. Teachers of students who are seen to be disruptive often appeal to the instrumental value of the subject. This is particularly true of Science, where pedagogy focuses upon limiting opportunities for disruption.

Students have the power to opt out from learning and this has the unfortunate effect of reinforcing the Science teachers' reliance upon instrumental values, such as learning about scientific procedure to get good grades in the exam, as a control mechanism.

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Classrooms encompass a complex web of power relationships in which students have considerable control over the extent and nature of their learning. When students are 'difficult' or 'disruptive' this directly reinforces a teacher's reliance upon instrumental values as a control mechanism. This was particularly the case in Science where teachers of 'difficult' or 'disruptive' students were likely to appeal to the subject's own instrumental values of scientific procedure. This put particular constraints upon the opportunity for teachers to encourage students to explore, or engage their curiosity: pursuing intrinsic values increased the number of unknowns, so that there was an increased chance of disruption, and teachers wished to avoid this. Derek explained:

> For some, probably they *(students)* will never appreciate any value. They will never really appreciate that Science is impinging on their everyday life....Indirectly you can have cooperation.. In that lesson it might have been done in an argumentative way, but that is not a problem, in Science argument is a very essential part. I have told them that they have not just come here to learn about Science, they are also here to learn about life, the way things work or don't work, and how to deal with different situations. We are dealing with behaviour modification of individuals or groups.

In this 'difficult' school Derek had decided that any Science that was learnt was a bonus, and that the focus of the lesson was 'behaviour modification'. Whereas Derek had a small class (there were only 9 boys) and so a certain amount of controlled experimentation was possible, Farouk was faced with 26 lively girls, and felt himself to be more constrained by the need to keep control. One result of this was that he banned them from carrying out experiments outside the classroom, and another was his reliance upon restricting experiments in the classroom to demonstrations at the front of his class, where he could keep all of his students gathered around his desk whilst he used the equipment.

In English (LA), there was group work, class discussion, and drama (e.g. acting out excerpts from plays), although, where there were difficult youngsters, the seating was often in rows, to allow greater teacher control. The lesson would then be teacher directed, with a style of question and answer (closed questions and short answers) which restricted the scope of debate in the interests of pace in the lesson.

3. Within our study, English (LA) teachers will introduce their values to their students as part of a 'balanced' debate. Whereas, Science teachers are uncertain as to the role of values within their subject teaching. The notion that the teacher acts as a role model is more acceptable to some, but not all, of the teachers in our study.

The English (LA) teachers in the study were aware of their role in inculcating values through the teaching of their subject. They accepted that this involved them in giving opinions as part of their interaction with students But they were also very wary of the accusation of bias. They talked of putting forward 'both sides of the case,' or 'a balanced point of view' and letting the students make up their own minds. Indeed, both teachers of Science and English (LA) said they felt hesitant about making clear statements of 'right and wrong' on issues of morality, such as stealing, violence or sexual behaviour. They felt themselves to be placed in a difficult position legally and ethically when asked for opinions on such issues.

> *Does the teacher's role involve right and wrong?*
> These words I have banned from my classroom. Because implicitly, or explicitly kids get the wrong message from us. We, as teachers can dismiss opinions, and also maybe don't listen enough to children.....I'm still very concerned about us imposing not only our educational values but our own moral values on the children. (Mary (LA): DC8)

This position reflects Mary's general unease with the schooling of children. She has little enough respect for the adults that run the education system, as we shall see, so why should she wish to impose their values on the students, when she would not wish to see them imposed on herself? Brenda's position is a different matter. She feels that not only does she not have the expertise to teach morals, but also that society is itself ambiguous about it.

> *Some people think that teachers should teach morals.* I don't think so, no. Because at the end of the day morals are your own personal values and I don't think you can impose your values on someone else. I believe that it is wrong to steal, but there are people who live by stealing, and while the majority vote might be that it is wrong to steal I don't think that me saying to these people that it is wrong to steal would change their views about it. (Betty (Sc): GCF Report. 18)

The Science teachers in this study were not convinced of the validity of expressing opinion, ethics or morality within their subject teaching. They viewed Science as objective and neutral, something that required technical competence rather than social and cultural understanding. English (LA) teachers recognise the place of ethical and moral issues within their subject, but were again wary of 'indoctrination' except perhaps where the preservation of individual rights were concerned. This view is put forward strongly by Gerry, when he addresses the values of National Curriculum English (LA):

> *What values do you think that the subject of English in the National Curriculum offers?* The way we teach it, certainly respect for individuals, the worth of the individuals, tolerance of individuals, equality of opportunity. Violently, almost violently anti-racist, with the kind of books that we read....If you look at the subject matter...the kinds of texts that are being pushed in the National Curriculum, those are the themes that come through. (Gerry (LA) :DC6a)

Gerry would be happy enough to deal in a forceful way with the morality of the texts he is teaching because they are in the 'legitimate' curriculum, but he would be less happy about a general requirement to teach 'morality.' Betty, a Science teacher, is unhappy with the idea of teaching morality, as we have seen. But, amongst the Science teachers, in the study, she was the most open to the exploration of issues that arose within her subject. She said that she would be happy to explore animal rights, the environment, and smoking from a Science point of view, but that this would have to be legitimised by the curriculum

For some teachers in our study, this unwillingness to teach morality extended to a deep unease at the notion that they themselves, as teachers, were role models for their students. Mary and Barry's perceptions of themselves led them into conflict with the values of schooling. They did not want to reinforce these values by seeing themselves as an idealised role model. However, they were unusual in this, in that the other English teachers did accept that to be a 'role model' was part and parcel of being a teacher, and that pupils 'get out what they like and discard what they don't.' (Jenny) Amongst two

women Science teachers (Susan and Betty), the notion of role modeling was strong. Betty had this to say:

> I was taught at 'A' level by a young female Science teacher, who I thought was an excellent teacher, and I thought well if I decide to go on and be a teacher then I would like to be a teacher like she is. So, I suppose she was acting as a role model. She was very enthusiastic, so they can act as role models from that point of view. I mean, I think that you could argue that they are role models in all sorts of ways. I think that it could be very difficult for instance, for me as a Biology teacher to be teaching about the danger of smoking if I myself smoked.

4. Respect is a contentious but important value. Differences in the interpretation of respect by the teachers in the study mean that this is not a shared value.

Respect emerged in the study as ill defined, but was linked to the power of the teacher. Amongst the majority of the teachers in the study respect was a concept that cropped up again and again as something that was seen as a 'good' thing to have, and to develop in children. However, there was no shared view of its meaning. For Colin (Science) respect was expressed, at first glance, as a relationship between equals:

> What do we say in the school? You've got to treat others like you would like them to treat you. That is the bottom line. That is what I drill into my form.

Is there not an incompatibility about treating people as you would like to be treated, and then 'drilling' such an idea into some body? This hints at the power relations of the classroom, an idea which Sandy, an English teacher, took further in her clarification of the concept:

> *What does the word respect mean in the context of being respected by students*....the teacher is the person present who has most seniority and hopefully who's most educated in the (specialist) subject ... and who has experience of dealing with other learning groups. And because ... .they have that experience ... there should be a certain deference from the students ... there should be a willingness to listen. (Interview: Pre 41-58)

There was a minority of teachers who extolled the virtues of respect in theory but rejected the form they saw it taking in practice. When Barry was asked what he thought respect meant he said:

> I think it means fear.

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Barry, was one of two English (LA) teachers, who could be considered to be engaging in resistance as cultural opposition (Giroux, 1983, p. 165-7) In their practice, Barry and Mary acted in opposition to the internal organisation of the school and Mary acted more explicitly in opposition to the procedures imposed by the school's management (administration). Through his use of language and management in the classroom, Barry challenges the reified work conditions.

> *You use the words 'bloody and bugger'.* Do I, I'm sorry? *Is it an issue for you?* It's taboo language, but its also an indication of intimacy. It's a bonding thing. So, it seems appropriate when the kind of relationship that I want with them is intimate rather than distant. *Have you had any difficulty with the use of this sort of language with parents or pupils?* ..we bought the wrong edition of 'A Day in the Life of Ivan Denizovich' and it had fuck in it. And it was in the 'Mirror' the following day. The parent had complained, because the school was supposed to be a repository of high standards.....We were talking before a sixth form party and I said, 'Where the bloody hells my lot?'. (the previous head said) he felt it offended his dignity....I was brought up in a pub, and part of going to public school (a prestigious private school) and then into a secondary modern (a state sector school for the less academically successful) was a necessity to accommodate my language in a socio-linguistic sense...other wise I was going to sound too pucker. (Post 11 – 25)

Barry's language would be considered by many teachers to defy the notion of the teacher as a role model for pupil behaviour. Pupils talk of him 'being on their level' and being able to 'relate' to them, and being 'not too stuck up'. His pupils think he is a 'good' teacher, but they also think that other teachers see him as being 'too soft' (Pupil 84 – 94). We shall see in the next finding that Barry does not consider himself to be a 'proper teacher'. Barry maintained that it was irrelevant to his practice what other teachers or students thought of him. For Barry, the work was the common bond between students and teacher, the text to be studied was what mattered.

The teacher's position is no guarantor of respect. Farouk's students were aware of the difficulties that teachers face with establishing discipline.

> P They are not different because they have got respect .... It is like they are not in control. P3 They're not. P4 Before they used to be in control, but now they are not. It has changed. *What has changed?* P2 Attitudes to us. People's attitude. Like in the '70's it has changed? *What has changed?* P4 The way the discipline

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> works. They used to cane or what ever, beat them up, what ever. P1 Like the whole environment has changed. (Farouk. Student 63 –92)

If respect was fear, then that type of respect had been undermined. Respect had to find new forms. Respect is a slippery concept. It can range from mutuality through deference to fear. The preoccupation of the teachers in this study with respect was associated with a desire to retain control, and perhaps with their own fear of disruptive pupil behaviour and even latent violence.

5. Teachers in the study do not have the opportunity to develop shared values, and Science teachers are likely to leave the classroom rather than remain in the system and take steps to resist the prevailing culture of isolation.

Resistance to the dominant culture of testing and an imposed curriculum was difficult to find. Whilst, as we have already seen, two English (LA) teachers did 'resist' in terms of their attitudes, and relations with other teachers, Science teachers were more likely to conform for a period of time and then leave school teaching altogether. Teachers in our study had a strong sense of their isolation, and there was little or no evidence of Habermasian communicative action since, typically, they acted in isolation with minimal opportunity to engage in dialogue with other teachers. Teachers struggled to comply with the demand to teach the specified curriculum and for the majority there was little evidence, especially amongst Science teachers, of cultural 'resistance' despite the difficulties they faced daily in the classroom. However, two older English (LA) teachers, Barry and Mary, who were trained and gained teaching experience before the introduction of the National Curriculum in 1988, openly engaged in cultural resistance, despite their leadership roles within their schools. Mary expressed a dislike of the very concept of the 'teacher'.

> I am a person....a human being who has feelings, who can get angry, who can be hurt, who has opinions...I hate the word teacher... maybe in my own arrogance, I do not have much respect for teachers...because of what I see and hear

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around the school. A lot of defensiveness....I think that we are narrow minded, we are afraid of lowering our defences.

Her rejection of what she sees to be the role of teacher is rooted in her perception that teachers are failing to be communicators in the Habermasian sense. Teachers talk in a manner that she does not recognise in any other situations. Teachers ask closed questions, respond in the affirmative or negative and move on. Teachers are in control, but don't listen, and she feels that this behaviour continues outside the classroom, in meetings, and in staff rooms.

Barry also feels uneasy with the idea that he is a teacher:

> I really cannot consider myself a proper teacher. I suppose that gets through. *What do you mean by that?*I mean that I am not credible myself as a proper teacher I'm still in the same frame of mind as when I was 23 and 24 and doing VSO (Voluntary Service Overseas, somewhat similar to the US Peace Corps). *What is a proper teacher?* Well, you know somebody who has got the rhetoric and the solemnity that you expect.*What sort of rhetoric would a proper teacher have?*. I don't know, but I can remember when I started teaching at school, there were solemn rebukes that did the job. Nobody is frightened of me. I feel that you have got to have a few missiles to carry around to be a proper teacher and I haven't got any. I'm sort of naked in the conference chamber. (Laughter)

Despite the unease that they both felt with their fundamental role as teachers, they were both heads (chairs) of department. Their positions owed much to their strengths as classroom practitioners. Both objected to the managerialism that had forced its way into school, and they clearly expressed their contempt for such an approach to education. Both were in their late fifties and had had unorthodox careers. Mary had had a career break of 16 years to bring up her family before returning to teaching and it was during this time that she says she had a 'real education', reading everything from Mills and Boon to Nietzsche. She felt at odds with the management (administration) of the school, and with the practice of education as she saw it currently demonstrated. By the time of the dissemination workshop, at the end of the project, Mary was reported to be off work due to 'stress'.

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Barry had previously resigned from the school after a disagreement with the previous head teacher and had only returned after he had left. He had a part time business as a photographer, and did not see himself as a career teacher. He felt that Ofsted[2] might not recognise him as a model teacher, and he disliked the management terminology that was entering education. In addition, two other English (LA) teachers, June and Jenny, organised their classes in terms of mixed ability, rather than in terms of ability sets, the preferred government option.

No such overt 'resistance' was found among the Science teachers. Instead, compliance appeared to have generated frustration and four of the 7 Science teachers had left the teaching of Year 10 Science by the end of the project. Susan had moved to a sixth form college (for 16-19 year old students, often with a good academic profile) and felt liberated from the requirement to admonish students over issues like uniform; Dennis had left teaching altogether (he did not have a job to go to, but 'would do anything'), as had Gordon, who left to become a Paramedic. Derek had also been promoted out of the classroom to become a deputy head teacher in London. 'Escape' routes appeared to be more of an option for the dissatisfied Science teacher, possibly because a qualification in Science could more easily be 'cashed in' for a job in another career.

Gordon, who left teaching within a term of finishing the research project, suggested that he felt estranged from other teachers. This estrangement touched upon a familiar concept: respect.

> I was just thinking in general that not all teachers respect other teachers anyway. But they can still do the job well. *What do you mean by that?* Well, I just feel it personally, about attitudes in staff rooms. People do not always respect other people. They might respect that they teach well, but they don't respect them as a person. Whether that is important in how that person does his or her job I'm not sure.

[2] Office for Standards in Education is a government agency which has the responsibility of inspecting schools and publishing their reports. Ofsted reports can lead to acclamation of a schools performance or, in extreme circumstances lead to its closure.

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Gordon explained how teachers did not, as a matter of course, talk about the purpose of their work, and he gave an impression of isolation, an impression which was to emerge from other data.

The teachers in our study have a strong sense of their own isolation and there is little or no evidence that they are engaged in communicative practice in the Habermasian sense. We have already referred to Barry's and Mary's views of teachers. Out of the sample of 15 teachers, within 18 months two had left teaching, one had died in tragic circumstances, one was off work long term suffering from stress, and another had left for a sixth form college so as to escape a school environment. Reading the transcripts there is a strong sense of isolation, and for some alienation.

> Dennis: I feel very isolated as a teacher. Stuck in a Science room on my own. Very lonely job. You don't meet any adults all day. Break time and lunch time are very brief. (Notes from 14th July) I never, ever get the chance to speak to my colleagues (Pre 95) *Do you ever go into the staff room?* Very rarely. *Why*? Because I get moaned at. *Who moans at you?* Who moans at me? (laughter) Oh the other teachers. You get 'such a boy in your form was doing this, I had to throw him out,' you know. ***So, you don't find the staff room a very positive experience?*** Oh, not at all. *Why?* I think teachers are born moaners personally. I think they do moan. Go in there for yourself and find out. (laughter) (Post 147 - 156)

From this study, it appears that resistance to the new model of education is low. The Habermasian notion of participative rationality 'inherent in communicative action' was not evident amongst these teachers in these schools, and it seems likely that the conditions of the English education system had shaped and constrained their behaviour to make this the case. Whilst two older English (LA) teachers rebelled against what they perceived to be the stifling practices of the new managerial education, scientists quit teaching in high schools. Communication between teachers for the purposes of developing understanding for informed action is not on the timetable, literally as well as metaphorically. When Betty said that, 'teachers get the syllabus and teach to it, and they don't have time to think', she was representing a common perception of the teacher's classroom experience. Betty was a scientist, but even the English (LA) teachers felt the pressure. English (LA) teachers were prepared to explore the values at work in their subject, but the majority were only comfortable with

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this if it was either sanctioned by the Qualifications and Curriculum Authority (QCA), a government agency which determines the school curriculum, or was conducive to the maintenance of classroom control.

The impact of teachers' values on student experience.

1. Teachers of English (LA) want their subject to explore the human condition,whilst Science teachers want to excite curiosity and offer an explanation of the world. However, English (LA) teachers are more successful than Science teachers in transmitting these intrinsic values to students.

Within the schools that participated in our research, both Science and English (LA), 'successful' students are motivated by instrumental values to gain high grades in the GCSE.

Those who are in 'top' sets are focused very much on their future performance in the exams. However, when asked if the subject had any importance beyond examinations in English (LA), students talked of the life skills aspects of the subject. One such class was exploring the uses of propaganda whilst studying Animal Farm:

> *Do you need to know about Animal Farm as a young man in West Yorkshire?* We need to pass our GCSE's *Any other reasons?* If you want to persuade somebody, then we have to lie. If you go for an interview for a job, then we have to lie about some things. *What sort of things?* Previous jobs, how reliable you are; your attendance....You should tell the truth.

This class is in an all boys' school, and they are a 'top' set, and can see an instrumental value beyond immediate examination concerns, although attendant moral values are contradictory, to say the least. In the all girls school, on an adjacent site next to the boys school, the classes are mixed ability and the

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girls came out with a more ethical statement when asked a similar question about their study of MacBeth:

> *Is it useful to a young woman growing up in West Yorkshire?* It can be in some ways, because it can tell you what is right and what is wrong. It can give you better understanding of different situations you could get into.

This ability of the English (LA) syllabus to relate to the situations that students find in their everyday lives gives it an advantage over Science. The subject explores the moral dimension through its texts and it also offers 'explanation', a value of worth in itself. In contrast, students in Dennis's top set saw the limitations of school Science:

> *If you wanted to learn something from Science, what one thing would it be, apart from the GCSE?* P1 Where you can understand about everyday things and then as well you can join in the conversations when people are talking about things and you have knowledge to join in with them and you know what they are on about. P2 So you don't go around everyday oblivious to what is going on. You can understand things. *Has Science got anything to do with your life outside of school? Apart from GCSE's?* P3 Not really, but it could be 'cos as he said about compounds and things. *Why do you work hard if it is not much use to you?* Because I want to get my GCSE's so I can get a better job. P1 Well, chemistry isn't much to do with real life, but when you think of the whole world, and the universe and things then it has something to do with that as well. P2 I want to get a job in Science, so I will work hard in it so I get a decent GCSE.

These students were motivated by the instrumental value of the subject, good GCSE's that would help them in the future. They could also see Science's potential to provide intrinsic value, to be able to join in conversations with knowledge that helps them understand 'what is going on'. They said earlier in the interview that they would like to study aspects of psychology, physiotherapy and genetics, but they doubted that they would. This concern for an instrumentality that stretches beyond the exam pass is frustrating these students, but not sufficiently for this frustration to get in the way of their studies.

2. Less academically successful students are alienated from the values of Science, and influences outside of the school play a part in this.

For those students thought to be less academically successful, English (LA) offers the development of life skills as an instrumental value, with the prospect of satisfaction from this increased social literacy. Pleasure from the insights these skills provide offers intrinsic value. In Science, the perceived remoteness of the subject matter and the dominance in lessons of the

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instrumental values of scientific procedure contribute to student disengagement from the subject.

In our study, frustration became more acute for those youngsters who were not to get a grade C or above. Gordon's 'top' class was disrupted by some of these youngsters and other students in Gordon's class joined in and were kept behind at the end of the lesson.

> *Why do you think that you were kept behind* Because it took us a long time to settle down at the beginning. Because of distractions outside of the class. Students coming to the wrong classes on purpose. I had a student next to me who was not in our class. Just messing around. Half way through the lesson he was thrown out of our class, and told to go to the next lesson. *Why do they come to the wrong classes on purpose?* Because they know that the next lesson will be pretty boring. (Gordon's Students (sc) DC 13)

> *Have you ever been silly in Science lessons, done daft things?* P1 Yeah. P2 Sometimes P3 Sometimes, sir. *What makes you do these things?* P1 For people's attention, sir. P3 Sir, when you continue talking, sir, and making your friends happy. Impress your friends. *Do people knock off (UK slang for missing class) more in Science than in other subjects?* P1 Sir, they miss off the boring lessons, sir. The lesson that they know. Sir in some lessons, sir, you are not even allowed to whisper, sir. Not even about work, sir. You just have to sit quiet. And if you are caught talking then you have to stay in for break, sir. P2 But, that is not fair. P1 Yes, and there is no point in coming to lessons.(Derek (Sc) DC13)

The constant reference to 'sir' also seems significant. It illustrates, perhaps, the importance to these students of playing the game of subservience to the teacher, of affording the teacher 'respect ' – perhaps of the fearful kind that Barry talks of.

The content of the Science curriculum, and its contingent pedagogy, increased student alienation, but funding, class size and attitudes towards the subject in wider society also contributed to an estrangement from the values of Science.

Some student behaviour in Science classes can be very challenging. Going to the wrong lessons deliberately, playing games that disrupt the class, 'winding up the teacher' are tactics that were observed during the research. Part of the reason for student misbehaviour in Science lay in the nature of the subject matter and its related pedagogy.

> *Why do you think you study Physics?* P1 No idea. P2 In case we become a Physics teacher. (Farouk (SC) DC 16)

> P2 Not that we are being sexist, but Physics isn't really a woman's thing is it? Well it's not mine. I don't really like it because I'm not into like, magnets, and messing about with copper bits and that. I'm not into weighing copper bits and blowing things up and that. That's not me.
> P4 Yeah, but you don't blow things up. That's what's so boring about it.

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> P3 Yeah, all we do is watch. P4 Sometimes when you do the experiments it gets so boring. You think, why bother? People have done this so many times. You don't learn anything new. It is like a right and a wrong. And I can't do things that are right and wrong. Things like English which are your opinion, that is better. But like Maths, there has to be a definite answer and that is it. You can memorise all these answers. If you don't get the answers then you have failed basically. (Farouk (SC) DC 17)

Farouk's female students explained in detail why they don't find Physics of use. Their behaviour in the lessons was disruptive, and they showed little interest. They explained their reasons for this. Some of these reasons could be addressed by changes in the syllabus and the approach to learning. More Science which explored the girls' world, using methods which helped students satisfy their curiosity, and developed their opinions would go some way towards addressing their disengagement from the subject. This approach would offer instrumental value similar to the social skill developments, and insight into the human condition approach of English (LA).

It was clear that many influences upon student attitudes to the exploration of values were not derived from the school itself. Farouk's students talked about the wider attitudes of society towards Science, and it is difficult to see how there are short term answers to these problems. In addition, Colin's students recognised other constraining factors: class size, and resources:

> P2 This school's skint. *Do you think that affects teachers?* P3 Yeah, because if they haven't got what they need to teach they get agitated and have to use rubbish stuff, like balloons in Science instead of proper apparatus. So if they had money to buy proper apparatus which could explain it easier, we would learn better. *Do you think it affects Colin?* P3.Yeah. P2 Yeah, he gets frustrated sometimes. Like not enough water baths. P3 Not enough starch. P1 That experiment. There were too many people in the classroom, and every one was too close on the tables, and I couldn't learn at all. (Colin (SC) DC19)

With the best will in the world, it is difficult to see how Science teachers can remain motivated in such conditions. It is perhaps small wonder that teachers often resort to 'me telling them how to find something out' rather than students using Science to explore their curiosity.

3. School rules, rather than developing shared values, were seen by less 'successful' students to be an indicator of social injustice and double standards.

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School rules were a major concern of students in the 'middle' sets, but hardly a concern at all for those in the 'top' or mixed sets. For the 'middle' sets school uniform added to their resentment, or was maybe a release for it.

> P3 They're stupid P1 Stupid. P4 There's no point. *What don't you like about the school rules?* P4 The uniform. P3 You can't even go and walk outside. P2 You are not allowed to walk outside to your lessons. You have to stay inside. P3 You can't tie your jumper round your waste even when it is hot outside. P2 You can't wear more than one pair of earings, and they are supposed to be studs.P3 You can't wear nose studs. P4 You have to wear shoes. P3 You are not allowed shaved hair. P2 You are not allowed hair with lots of colour. (Barry's Students (LA) DC3)
>
> *Is there anything about the school rules that you do not like?*
> P1 Everything! *(laugh)* It is stupid that you can't have coats on in school isn't it?
> P3 Your not allowed to carry your coat in school.
> P1 If you haven't got a locker, then what are you supposed to do?
> P3 You have to wear school shirts.
> P1 You are not allowed to chew gum, now that's just stupid.
> P3 Because some people leave it all over the place.
> P2 You get detentions for chewing chewing gum, so you don't want people to catch you so if a teacher comes you don't want them to catch you, so you stick it under a desk, or summat.
>
> *Some people think that they should be teaching you about right and wrong. Do you think that it is the place of the school to do that?*
> P2 Yeah, but we don't have rules like that we just have 'don't carry coats in school, don't chew gum, don't wear earrings, don't wear make up.' It's totally irrelevant to the teaching. P3 They're not positive things they are negative things. (Millicent's Students (LA) DC3a)

These students saw school rules as 'stupid' and 'pointless' and the teachers' role in enforcing these rules as an indicator of their desire for power and control. Small indications from many teachers that they were enforcing rules which they did not see as important could only strengthen the students' sense of the double standards that the school represents.

We have seen in one of the earlier students' quotes, their ambiguous approach to the uses and abuses of propaganda. These students came from a classroom where the teacher had banned the use of the words 'right' and 'wrong' in favour of always presenting 'a balanced view'. This was unusual in the sample. Other teachers did not come out and say that they had banned explicit teaching of the difference between right and wrong, but they felt uneasy about it, and certainly felt that they did not

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have the expertise to deal with it. English (LA) teachers dealt with 'moral' issues in a procedural manner, setting up debates with 'balanced' opinions, whilst the Science teachers felt that it was not in their remit to deal with the exploration of values within their subject. In contrast to the teachers' reticence to make clear statements about 'right and wrong' they were prepared, often reluctantly, to enforce school rules that teachers themselves often felt 'got in the way' of learning.

In this study, there is considerable evidence of student 'resistance' to schooling and the curriculum, particularly in Science, but, as in Willis' seminal study (op.cit.) this is likely to have the effect of excluding them from future material rewards rather than developing them as independent, critical thinkers. Their resistance is an indicator of alienation rather than positive engagement in a process of communicative action. In truth they have no other option, since they lack the opportunity to engage in dialogue with the adults who mediate their educational opportunities (teachers) on equal terms. For Habermas (1984, p. 95), 'The communicative model of action presupposes language as a medium of uncurtailed communication whereby speakers and hearers, out of the context of their preinterpreted lifeworld, refer simultaneously to things in the objective, social, and subjective worlds in order to negotiate common definitions of the situation.' This ideal speech situation, rare in any social group, is very far from the reality for students in our study schools. Moreover, the education system which offers them, on the basis of the National Curriculum, preparation for high stakes examinations, is fundamentally antipathetic to educating them in 'the interpretive accomplishments on which cooperative processes of interpretation are based (which) represent the mechanism for coordinating action' through dialogue' (Habermas 1984, p. 101).

Discussion Card 17 Girls and Physics: An example of the materials, based on the findings, for use in teacher professional development

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The ReVISE Project has produced, on the basis of these findings, a pack of materials, made up of 'dilemma cards' for use in teacher professional development. These cards are of three types (related to Science teaching, English (LA) teaching and general issues that face all teachers). They consist of selected quotations from teacher and student interviews that present differing views on the same topic, questions to guide discussion on the issues raised by these quotations, and suggested reading.

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17. Girls and Physics

The purpose of this card.

The cards are designed to encourage exploration of those aspects of schooling which are often part of the hidden curriculum. In particular, this card looks at the motivation of girls to learn and do well in Physics in an all girls school. The aim is to identify those aspects of interaction that departments may wish to encourage, and that individual teachers may wish to maintain. The cards should not be used to remove differences in individual approaches, but to increase awareness of the values at work in the curriculum, and to make informed decisions about them.

How this card can be used.
Read the quotations from the teacher and their pupils, and then working in small groups, consider the **key questions** with your colleagues. You may also wish to use some of the **activities.**

The quotations on this card were taken from interviews with the teacher, and after the lesson, with the teacher's Yr 10 pupils.

The Year 10 Teacher

1
What sorts of things make it difficult for girls here to learn Physics? There are a couple of things. First of all they are not introduced to Physics at an early age. This is a big problem in Primary Schools, because the teachers themselves are not confident to teach Science, and the other thing is a social barrier: they are girls and it is true, even in Britain now, the social barriers; Physics and Mathematics are not for girls, they are for boys.

2
And their parents do not encourage them. They say 'Physics. Oh my god. I don't understand.' Even when I talk to adults, they ask me 'what do you do?' They say 'Oh my god.' This is the response. This gives an indication of how society as a whole feels about Physics, and about Maths in General.
You mention Maths there as well.
It is always the Physics and the Maths, it applies to both of them.

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The Year 10 Pupils

A

P2 For us it is just boring, because we are into other stuff.

P4 But there again, you are probably right about what you say about women. Because it is just the way that we have been brought up really.

P4 I mean, you don't hear your mum say 'well forget the cooking, well here's a magnet. 'They don't do that do they?

P1 You've really got to be into learning about magnets and electricity and everything to understand Physics. But if you don't..... **Your teacher and other Physics teachers would like to change that** and **make it** a **girls subject. Do you think that is a good thing to want to do?**

P4 Yeah, but especially in an all girls school. But it is also true of the parents though because in my family I've got two brothers and they are like 'Oh, you are doing mostly sciences,' and they are doing sciences for A levels. But then they have got me, and they are 'oh no, you can stick to English and Sociology, and German and Media Studies.'Also I want to do that. **Is that a home or school influence?** Mostly home.

Key Questions

The task of the group is to consider the following questions:

* is there any truth in the teacher's assertions about Primary School Science and social barriers?
* Is Physics about right and wrong?
* How would the girls like Physics to be made more interesting?

Activities

Consider:

* if there is a role for pupils' views in Physics? (See Quote B)
* how the image of Physics can be more female friendly in early years in the secondary school.
* how the practice of Physics can be made to be more female friendly.

Further Reading:

Taber, Keith. S. (i991)'Girl Friendly Physics in the National Curriculum'in Physics Education Vol. 26 no. 4, p221-226

B

P2 Not that we are being sexist, but Physics isn't really a woman's thing is it? Well it's not mine. I don't really like it because I'm not into like, magnets, and messing about with copper bits and that. I'm not into weighing copper bits and blowing things up and that. That's not me. P4 Yeah, but you don't blow things up. That's what's so boring about it.

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Conclusions

On the basis of our research working with 15 teachers and their students in five schools in northern England, during 1999 - 2000, it seems that:

The institution of the school and the power of the teacher are important factors in shaping the student-teacher relationship. Students view teacher motives with a certain degree of skepticism. Students will explore values if they perceive this to be in their interests, but they do not respond well to exhortation. Students want relationships of integrity with teachers: relationships where teachers listen and respond to the students' interests and motivations.

Subject teachers are uncomfortable with the promotion of moral values outside of the context and aims of their own subjects. The teachers' main purpose is the teaching of their subject, which involves knowledge, skills and attitudes. Attitudes, as responses to stimuli, are underpinned by values. In this context some teachers are prepared to explore these values, but not to impose them. Currently, a number of teachers in the sample, particularly some less confident teachers of English (LA), and a variety of Science teachers, are unsure of the validity of exploring such values. They are not prepared to take the risk.

The perceived risk has to be understood in the context of possible litigation. Teachers are no longer as secure in their authority as they used to be. There are things they are obliged to do in school time, while at the same time they may be held publicly accountable for their words and actions. There is a legal requirement for teachers to teach the National Curriculum enshrined in the Education Reform Act and other more recent legislation, and these laws are upheld through detailed specifications (e.g. the literacy hour) and inspection by Ofsted. The content-packed curriculum reduces the time that is available to explore 'big' issues, whilst 'section 28', prohibiting the 'promotion' of homosexuality in schools, is an example of teachers being forbidden from discussing one such issue.

This research suggests that subject teachers need to feel much less pressured by a content-packed curriculum if they are to be willing to take on the role of moral educators. It also seems very clear that there is a need to question the value of school rules that deal with relatively trivial matters and neglect major issues such as stealing. Values at the whole school level need to be perceived in a positive light, and should be based upon an optimistic perception of human behaviour. To one of our student informants it was clear that schools would do better to spend time on 'a lot of encouragement' rather than on enforcing 'stupid little rules like 'don't chew gum'.

In the Science classrooms we observed, values were concerned with increasing understanding of the methods of Science, but failed to address the expressed values of teachers that they should address the desire to satisfy curiosity and exploration. With notable exceptions, students were introduced to a diet of unexplored institutional and technical values, such as the primacy of work, the importance of co-operation for the completion of tasks, the careful examination and recording of phenomena. In Science, instrumental values become ends in themselves and , for the students who felt that they would achieve poor exam grades this made Science something of a dead end for them.

English (LA) teachers were striving to link the instrumental concerns of developing social and communication skills, embedded in the expressed values of the power of language and the development of the students with what might be termed intrinsic humanist values concerned with 'discovery of the inner person'.

A common theme of the data in Science and English (LA) was 'respect', a hydra headed concept that was often linked to claims of authority. Teacher authority was based upon their subject expertise, but, when this expertise was rejected by students, respect became a concept which was discredited if teachers appealed to fear.

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Students viewed school attempts to address values with instrumental interest, which meant they were not prepared to explore them, or necessarily hold to them. In both English (LA) and Science, instrumental interest means compliance with classroom procedures determined by the teacher. More specifically in Science it meant adherence to scientific method and in both English (LA) and Science it meant a recognition of the importance of examinations The message for the students was that adherence to such values was considered a pre-requisite of success at school. On occasions, particularly where students felt that they were academically 'failing', they demonstrated outright contempt for school's attempts to transmit these values.

Schools promote the commodification of knowledge through the the assessment system; an assessment system that has beome more intense since the introduction of the Education Reform Act in 1988. The subliminal message that school sends out is quite negative. Schools are dominated by instrumental values, primarily aimed at compliance with the national examination system. Schools are pre-occupied with the enforcement of petty rules concerning the number of rings in the ears and footwear, in order to maintain some sort of respect for schooling, whilst the classroom experience ignores larger issues of the human condition.

Meanwhile, across the globe (Papadopoulos 1995) there is a perceived threat to shared community values. Citizenship will need to explore fundamentals of the human condition if it is to touch on these values. The new national Citizenship initiative in England claims that it will make students 'more self confident and responsible both in and beyond the classroom', whilst teaching students 'about our economy and democratic institutions and values'(QCA. 1999. P12 – 13), but faced with the reality of experience for students and teachers in subject study, where Science often takes 15% of curriculum time and English (LA) 12.5% it is difficult to see how an additional area of study, which may occupy 5% of curriculum time, in an already overcrowded curriculum, can be more than a sticking plaster which

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ignores the everyday experiences of the classroom, an experience shaped by the needs of a society based upon technical rationality

An exploration of the values in education, of necessity, raises fundamental questions about the validity of the curriculum, pedagogy and relationships. This could be a cause of further insecurity for a number of teachers. Exploration of these issues needs to offer gains for teaching and learning, and take place in circumstances that are supportive and non threatening. In short, professional development materials have to help teachers deliver the curriculum in the circumstances that they are faced with. However, funders of research and curriculum materials want recipe answers to curriculum problems, not to reflect upon changes (Popkewitz 2000)

Solutions may appear simple. For example, it can be argued that teachers have a duty to uphold those values relating to respect for human life (murder is wrong) and the ownership of property (stealing is wrong) which are basic to being a citizen of a civilised society. The new Citizenship curriculum has been brought in by the British government to counter the perception, amongst some sectors of the public, that teachers are failing in this duty. In support of this view, our research does, indeed, provide evidence of ambivalence amongst a group of 15 teachers about making any definite statements of right and wrong, including in once case a teacher who is not prepared to make a firm statement denouncing stealing. However, our research also shows that teachers can be said to adopt these views as a rational response to finding themselves in an authoritarian role in schools, which no longer command the respect (in the sense of either fear or veneration) from students and the wider community which in the past justified this authority. Schools, as agents of the education system, themselves appear from our research to be immoral in some aspects of their enactment of values through pedagogy and associated mechanisms of student control, such as school rules which focus the attention of staff and students on the trivia rather

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than issues of fundamental human values. The Habermasian communicative model of action offers a very different vision of a society that creates its moral values through dialogue and interactive decision-making between equals. This kind of approach, which has resonances with the work of Stenhouse's Humanities Curriculum Project and Bruner's MACOS, can be argued to be impractical in a society which is so fundamentally pluralist that it has few anchors to form the basis for making judgements of value. On the other hand, certainty may only serve to exclude if that certainty does not derive from the self-confident exploration of values by students and teachers. It is uncertainty surrounding the teacher's role and the teacher's day to day concerns of how to deal with the excluded that undermines the meaningful consideration of values. However, classrooms in which pedagogy and teacher-students relations actively negate the values of community, shared responsibility, honesty and openness will only compound the alienation of both students and teachers. Teachers often do not have the expertise to develop values in their classroom, but they should be encouraged by their schools, curriculum and assessment bodies to do so, and supported in gaining the necessary expertise.

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